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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,453

10/07/2005

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Q90153

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65565 7590 06/30/2009

SUGHRUE-265550

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EXAMINER

DAGER, JONATHAN M

ART UNIT

PAPER NUMBER

3663

MAIL DATE

DELIVERY MODE

06/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,453	Applicant(s) NAGASAWA ET AL.	
	Examiner JONATHAN M. DAGER	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 2, filed 09 March 2009, with respect to the objection to the specification have been fully considered and are persuasive. Therefore, the objection to the specification has been withdrawn.

2. Applicant's arguments, see pages 2-4, filed 09 March 2009, have been fully considered but they are not persuasive.

The Applicant has contended that claims 1 has not been anticipated by Oniishi (US 5,859,845), and that the prior rejection of the claim should therefore be withdrawn.

The Examiner respectfully disagrees; regarding claim 1, Oniishi discloses a vehicle load control system suitable for use in controlling electric power fed to lamps and motors aboard a vehicle (column 1 lines 6-7).

The load control invention comprises a control section which has a plurality of control switches and generates a control signal corresponding to the actuation of each of the control switches, a multiplex processing section which multiplexes the control signal received from the control section and sends the thus multiplexed control signal to a multiplex transmission line, and load control sections which receive the multiplexed control signal sent over the multiplex transmission line and control the electric power fed to a corresponding one of loads on the basis of the thus received control signal (column 2 lines 58-67, column 3 line 1).

Thus, Oniishi has disclosed an invention fully capable of controlling the load electrical parts in the front of the vehicle, a control unit receiving a control signal for controlling the drive

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of the load electrical part through a main bus line of the vehicle, as well as a drive control unit which is connected to the controller through another bus line, wherein the signal is converted into a drive signal for the load electrical part.

Oniishi also discloses that the mounting position for the invention for the front electrical control unit is mounted next to the driver's seat (column 9 lines 10-12). Thus, the invention is located in the front portion of the vehicle.

Oniishi also discloses that the multiplex communication system employs a centralized control communications protocol which uses the load drive unit A 20 as the master node. The structure of characters of the data comprises one start bit, eight data bits, one parity bit (even), and one stop bit, as shown in FIG. 26. In the drawing, Tc designates a character time. The frame of the data comprises a header, the data (eight bytes), and BCC (block check characters = a checksum), as shown in FIG. 32A. A predetermined interval period Tci is ensured between the characters. In the header, a frame number is made up of B0-B3, as shown in FIG. 27B. A transmission unit ID code is made up of B4 and B5, as shown in FIG. 27C. A communication mode ID code is made up of B6 and B7, as shown in FIG. 27D (column 15 lines 66-67, column 16 lines 1-12).

Fig. 1 details a basic block diagram of the load control system. The SW unit 10 is connected to a control section 11. The control section 11 comprises a plurality of switches 11.sub.1 -11.sub.n arranged in a control panel (not shown), and light sources 12 for illumination purposes which are incorporated in the respective control switches for illuminating the surface of the control switch, and a light source 12 for use with an indicator which indicates operating conditions. The control section 11 generates a control signal corresponding to the actuation of

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each control switch. The SW unit 10 comprises a control section 10b which receives the control signal from the control section 11, being made up of the control switches 11.sub.1 -11.sub.n and connected to the SW unit 10, through an input interface (I/F) 10a, and nonvolatile memory 10g which is connected to the control section 10b and is made up of E.sup.2 PROM holding various data as will be described later (column 7 lines 6-19)

The control section 10b converts the received control signal into control data and generates a transmission frame by collecting a plurality of thus converted control data items. The control section 10b sends the transmission frame to the load drive units A 20 and B 30 through the communication interface (I/F) 10c and the multiplex transmission line 40. Further, the control section 10b outputs a drive signal to a drive section 10e consisting of switching means (not shown) through an output interface (I/F) 10d. Upon receipt of the drive signal, the drive section 10e is activated so as to control the illumination of the light sources 12 respectively provided in the control switches by selectively feeding the light sources the electric power from a power supply 10f. The power supply 10f is supplied with the electric power fed from the battery 50 through the power line 60b. The power supply 10f also feeds operating power to the input I/F 10a, the control section 10b, and the output I/F 10d.

The load drive unit A 20 is connected to a first electrical equipment group mounted on the body of the motorbus, that is, loads 21.sub.1 -21.sub.n. Further, the load drive unit A 20 is provided with a control section 20b which is connected to the SW unit 10 via the multiplex transmission line 40. The control section 20b receives the control data from the SW unit 10 by way of a communications interface (I/F) 20a. The control section 20b sends a drive signal based on the received control data to a drive section 20d, consisting of unillustrated switching means,

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by way of an output interface (I/F) 20c. The drive section 20d is activated by the received drive signal so as to drive an associated load by selectively feeding the electric power received from a power supply 20e to the load. The power supply 20e is supplied with the electric power fed from the battery 50 through the power line 60a. The power line 60a led into the load drive unit A 20 is divided into power lines 60b and 60c. The load drive unit A 20 is provided with a fuse F and a fusible link FL which respectively connect the power line 60a with the power lines 60b and 60c (column 7 lines 21-56).

Thus, Oniishi discloses that the front electrical control unit converts the control communication signal of the main bus line into a usable signal of the sub-bus line, and transmits the control signal received through the main bus line to the drive control unit through the sub-bus line.

Therefore, Oniishi anticipates all embodiments of independent claim 1.

2a. It is noted that the Applicant has contended on page 3 that Oniishi does not disclose or suggest at least a conversion feature of the present invention.

The Examiner respectfully disagrees; as noted above, the control section 10b converts the received control signal into control data and generates a transmission frame by collecting a plurality of thus converted control data items. The control section 10b sends the transmission frame to the load drive units A 20 and B 30 through the communication interface (I/F) 10c and the multiplex transmission line 40 (column 7 lines 21-26).

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Thus, the multiplex processing station of Oniishi takes a signal in a first form on the main bus, processes it, and converts it to another usable form. The signal is then sent to the load control section on the sub-bus.

2b. Even if Oniishi does not explicitly or inherently anticipate this embodiment, which is not an admission by this office, it is noted that claim 1 contains multiple statements of intended use or field of use (e.g. “wherein...converts”, “converting the control signal”, etc.). These statements of intended use (or field of use) and "wherein" clauses are essentially method limitations. Thus, these claims, as well as other statements of intended use, do not serve to patentably distinguish the claimed structure over that of the reference.

See MPEP § 2114 which states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions.

Apparatus claims cover what a device is not what a device does.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Additionally, the terms “configured to” or “arranged to” are considered to be structurally modified statements and are not intended use. Claims amended to include the above listed language may patentably distinguish themselves structurally.

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Therefore, claim 1 remains rejected under 35 U.S.C. 102(b) as anticipated by Oniishi, for those reasons above, and those cited in the prior action, which is incorporated herein.

3. Applicant's arguments, see page 4, filed 09 March 2009, with respect to the rejection of claims 2, 3, 5, and 11 under 35 U.S.C. 102(b) have been fully considered but they are not persuasive.

The Applicant has contended that since claims 2, 3, 5, and 11 depend from the now allowable independent claim 1, the claims are allowable.

The Examiner respectfully disagrees; independent claim 1 remain rejected, hence, claims 2, 3, 5, and 11 remain rejected under 35 U.S.C. 102(b) as anticipated by Oniishi for those reasons cited above, as well as the previous grounds discussed in the prior office action, which are incorporated herein.

4. Applicant's arguments, see page 4, filed 09 March 2009, with respect to the rejection of claims 4 and 6-10 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

The Applicant has contended that since claims 4 and 6-10 depend from the now allowable independent claim 1, the claims are allowable.

The Examiner respectfully disagrees; independent claim 1 remain rejected, hence, claims 4 and 6-10 remain rejected under 35 U.S.C. 103(a) as obvious in view of the combination of Oniishi and Imaizumi (US 5,978,352), for those reasons cited above, as well as the previous grounds discussed in the prior office action, which are incorporated herein.

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Again, it is noted that claims 4, 6, and 11 contain multiple statements of intended use or field of use (e.g. "wherein...for driving", "wherein...transmits", etc.). These statements of intended use (or field of use) and "wherein" clauses are essentially method limitations. See above.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN M. DAGER whose telephone number is (571)270-1332. The examiner can normally be reached on 0830-1800 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD

24 June 2009

/Jack W. Keith/

Supervisory Patent Examiner, Art Unit 3663

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